Version with Markings to Show Changes Made

[1. Process for the production of a surface coating to increase surface tension of objects, comprising depositing a layer of at least one element that can be oxidized with water or an alloy that can be oxidized with water on an object and this is at least superficially oxidized by the subsequent action of boiling water or water vapor on the deposited layer.]

[2. Process as claimed in claim 1, wherein the surface coating is obtained by deposition of a layer of at least one element that can be oxidized with water or an alloy that can be oxidized with water and subsequent action of superheated water vapour.]

[15. Analytical test element in which the sample liquid is transported from a sample application site to a determination site, where a detection site lies upstream of the sample application site in the transport direction, wherein the analytical test element comprises at least one surface which is composed of at least one element that can be oxidized with water or an alloy that can be oxidized with water which has been treated by the action of boiling water or water vapor.]

[27. Process of claim 1 wherein the deposited layer has a thickness between 1 nm and 500 nm.]

[28. Process of claim 1 wherein the superficial oxide layer has a thickness between 0.1 nm and 500 nm.]

Clean Version of Replacement Claims for Entry During Prosecution of US Application No. 09/555,618

3. Use of a surface coating to increase the surface tension of objects, wherein the surface coating is obtained by deposition of a layer of at least one element that can be oxidized with water or an alloy that can be oxidized with water and subsequent action of boiling water or water vapour on the deposited layer.

4. Use of a surface coating as claimed in claim 3, wherein the surface coating is obtained by deposition of a layer of at least one element that can be oxidized with water or an alloy that can be oxidized with water and subsequent action of superheated water vapour.

5. Use of a surface coating as claimed in claim 3, wherein the element is derived from the following group of elements: Al, Si, Ti, V, Cr, Mn, Fe, Co, Ni, Zn, Ga, Ge, Zr, Nb, Cd, In, Sn, Sb.

6. Use of a surface coating as claimed in claim 5, wherein the element is derived from the following group of elements:
Al, Si, Ti, Zr.

7. Use of a surface coating as claimed in claim 6, wherein the element is Al.

8. Use of a surface coating as claimed in claim 3, wherein the alloy contains at least two components from the following group of elements:
Al, Si, Ti, V, Cr, Mn, Fe, Co, Ni, Zn, Ga, Ge, Zr, Nb, Cd, In, Sn, Sb.

9. Use of a surface coating as claimed in claim 3, wherein the alloy contains at least one component from the following first group of elements: Al, Si, Ti, V, Cr, Mn, Fe, Co, Ni, Zn, Ga, Ge, Zr, Nb, Cd, In, Sn, Sb, which are alloyed with at least one element from the following second group of elements: Mg, Ca, Sr, Ba.

10. Use of a surface coating as claimed in claim 9, wherein the alloy contains at least one component from the following first group of elements:
Al, Si, Ti, Zr,
which is alloyed with at least one element from the following second group of elements:
Mg, Ca, Sr, Ba.

11. Use of a surface coating as claimed in claim 10, wherein the alloy is composed of Al which is alloyed with at least one element from the following group

of elements:

Mg, Ca, Sr, Ba.

12. Use of a surface coating as claimed in claim 3, wherein the deposited layer has a thickness between 1 nm and 500 nm.

13. Use of a surface coating as claimed in claim 3, wherein the superficial oxide layer has a thickness between 0.1 nm and 500 nm.

14. Use of a surface coating as claimed in claim 13, wherein the superficial oxide layer has a thickness between 10 nm and 100 nm.

16. Use of a surface coating as claimed in claim 4, wherein the element is derived from the following group of elements: Al, Si, Ti, V, Cr, Mn, Fe, Co, Ni, Zn, Ga, Ge, Zr, Nb, Cd, In, Sn, Sb.

17. Use of a surface coating as claimed in claim 4, wherein the alloy contains at least two components from the following group of elements: Al, Si, Ti, V, Cr, Mn, Fe, Co, Ni, Zn, Ga, Ge, Zr, Nb, Cd, In, Sn, Sb.

18. Use of a surface coating as claimed in claim 4, wherein the alloy contains at least one component from the following first group of elements: Al, Si, Ti, V, Cr, Mn, Fe, Co, Ni, Zn, Ga, Ge, Zr, Nb, Cd, In, Sn, Sb, which are alloyed with at least one element from the following second group of elements: Mg, Ca, Sr, Ba.

19. Use of a surface coating as claimed in claim 4, wherein the deposited layer has a thickness between 1 nm and 500 nm.

20. Use of a surface coating as claimed in claim 4, wherein the superficial oxide layer has a thickness between 0.1 nm and 500 nm.

21. Use of a surface coating as claimed in claim 5, wherein the deposited layer has a thickness between 1 nm and 500 nm.

22. Use of a surface coating as claimed in claim 5, wherein the superficial oxide layer has a thickness between 0.1 nm and 500 nm.

23. Use of a surface coating as claimed in claim 8, wherein the deposited layer has a thickness between 1 nm and 500 nm.

24. Use of a surface coating as claimed in claim 8, wherein the superficial oxide layer has a thickness between 0.1 nm and 500 nm.

25. Use of a surface coating as claimed in claim 9, wherein the deposited layer has a thickness between 1 nm and 500 nm.

26. Use of a surface coating as claimed in claim 9, wherein the superficial oxide layer has a thickness between 0.1 nm and 500 nm.

Clean Version of Replacement Abstract for Entry in Ser. No. 09/555,618

Abstract

A process is provided for the production of a surface coating as well as the use of surface coatings to increase the surface tension of objects. The surface coating is obtained by depositing a layer of at least one element that can be oxidized with water or an alloy that can be oxidized with water. Subsequently, the deposited layer is subjected to boiling water or water vapour. The element is generally derived from the following group of elements: Al, Si, Ti, V, Cr, Mn, Fe, Co, Ni, Zn, Ga, Ge, Zr, Nb, Cd, In, Sn, Sb.